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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,566	08/15/2003	Timothy Stamps	40661-029	3103
29493	7590	07/26/2005	EXAMINER	
HUSCH & EPPENBERGER, LLC 190 CARONDELET PLAZA SUITE 600 ST. LOUIS, MO 63105-3441			SHECHTMAN, SEAN P	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,566

Applicant(s)

STAMPS ET AL.

Examiner

Sean P. Shechtman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/15/03</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 39-61 are presented for examination. Claims 1-38 have been cancelled.

Priority

2. The current status of the parent nonprovisional application(s) should be included.

Claim Objections

3. Claim 40 is objected to because of the following informalities: Referring to line 8, the examiner respectfully submits that "feeder" should be replaced with feed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 39-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 39 recites the limitation "said bale wire length" in lines 10-11. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 39 recites the limitation "said length of bale wire" in lines 12-13. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 39 recites the limitation "said moveable guide track section support assembly" in line 15. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 39 recites the limitation "said wire length end portions" in line 16. There is insufficient antecedent basis for this limitation in the claim.

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8. Claim 39 recites the limitation "said moveable guide track sections" in line 19. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 43 recites the limitation "the bale" in line 2. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 44 recites the limitation "said bound bale" in line 3. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 44 recites the limitation "said moveable guide track" in line 4. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 46 recites the limitation "the position status" in line 2. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 46 recites the limitation "said strut position data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 46 recites the limitation "said eject position" in line 5. There is insufficient antecedent basis for this limitation in the claim.

15. Claim 47 recites the limitation "said progressing bale wire" in line 2. There is insufficient antecedent basis for this limitation in the claim.

16. Claim 47 recites the limitation "said gripper" in line 3. There is insufficient antecedent basis for this limitation in the claim.

17. The term "substantially" in claim 47 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The deceleration of progressing bale wire has been

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rendered indefinite by the use of the term substantially. The term "substantially" is often used in conjuncture with another term to describe a particular characteristic of the claimed invention. It is a broad term. In re Nehrenberg, 280 F 2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation "to substantially increase the efficiency of the compound as a copper extractant" was definite in view of the general guidelines contained in the specification and the rest of the claim. In re Mattison 509 F .2d 563, 184 USPQ 484 (CCPA 1975). In this application, the specification and the rest of the claims fail to provide for such guidelines.

18. The term "about" in claim 47 is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The deceleration of progressing bale wire has been rendered indefinite by the use of the term about.

19. Claim 48 recites the limitation "said progressing bale wire" in line 2. There is insufficient antecedent basis for this limitation in the claim.

20. Claim 54 recites the limitation "said tying cylinder" in line 2. There is insufficient antecedent basis for this limitation in the claim.

21. Claim 57 recites the limitation "the bound bale" in line 2. There is insufficient antecedent basis for this limitation in the claim.

22. Claim 58 recites the limitation "said programmable logic controller" in line 3. There is insufficient antecedent basis for this limitation in the claim.

23. Referring to claim 60, lines 3-6 are unclear, for example, -what is ready to bale?

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24. Claim 60 recites the limitation "said guide track loop" in line 8. There is insufficient antecedent basis for this limitation in the claim.

25. Claim 60 recites the limitation "said closed loop position" in line 9. There is insufficient antecedent basis for this limitation in the claim.

26. Referring to claim 60, lines 15-17 are unclear, for example, - what is "after said tensioning gripper securing said bale strapping length distal end portions"?

27. Claim 60 recites the limitation "said moveable guide track section support assembly" in page 8. There is insufficient antecedent basis for this limitation in the claim.

28. Referring to claim 61, line 7, it is unclear what is "where"?

29. Claim 61 recites the limitation "said guide track loop" in line 9. There is insufficient antecedent basis for this limitation in the claim.

30. Claim 61 recites the limitation "said closed loop position" in line 10. There is insufficient antecedent basis for this limitation in the claim.

31. Claim 61 recites the limitation "said loop limit switch" in line 16. There is insufficient antecedent basis for this limitation in the claim.

32. Claim 61 recites the limitation "said moveable guide track section support assembly" in page 10. There is insufficient antecedent basis for this limitation in the claim.

33. Claim 58 recites the limitation "the apparatus" in line 1. There is insufficient antecedent basis for this limitation in the claim.

34. Claim 59 recites the limitation "the apparatus" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Due to the number of 35 USC § 112 rejections, the examiner has provided a number of examples of the claim deficiencies in the above rejections, however, the list of rejections may not be all inclusive. Applicant should refer to these rejections as examples of deficiencies and should make all the necessary corrections to eliminate the 35 USC § 112 problems and place the claims in proper format.

Due to the vagueness and a lack of clear definition of the terminology and phrases used in the specification and claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

35. Claims 39-45, 47-50, 54, 56, 57, 60, 61 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,498,379 to Saylor (supplied by applicant).

Referring to claim 39, 60 and 61, Saylor teaches a data structure embodied in a machine readable storage medium controlling a bulk material baler (Col. 11, lines 8-28) comprising:

an instruction to a moveable guide track section support strut to move from a removed position to a closed position when a compression apparatus advances a volume of bulk material to be baled into a compressed position in a baling station (Fig. 11, Col. 4, lines 35-40; Col. 6, lines 1-67; Col. 10, lines 60-63; Col. 12, lines 13-18 and lines 38-40);

an instruction to a bale wire feed drive to feed a predetermined length of bale wire into a guide track loop when said moveable guide track section support strut reaches said closed position (Col. 5, lines 26-30; Col. 8, lines 6-16; Col. 9, lines 20-25);

an instruction to a wire cutter to cut a proximal end of said bale wire length (Col. 12, lines 47-48);

an instruction to a wire knotter to knot a proximal end portion of said length of bale wire together with a distal end portion of said predetermined length of bale wire (Col. 12, lines 49-57);

an instruction to said moveable guide track section support strut assembly to move to said removed position after said wire length end portions are knotted together (Fig. 12; Col. 4, lines 35-40; Col. 11, lines 53-67; Col. 12, lines 1-6 and 38-40); and

an instruction to said compression apparatus to release from said compressed position after said moveable guide track sections are moved away from said compression apparatus (Col. 4, lines 35-40; Col. 8, lines 38-50).

Referring to claims 39, 60, and 61, the examiner respectfully submits that the claims, as such, do not require that any instructions be data structures. Nonetheless, Saylor clearly teaches operations taught are implemented with a conventional control circuit (Col. 11, lines 8-28). The examiner respectfully submits that this conventional control circuit reads on the limitation of a data structure embodied in a machine readable storage medium controlling a bulk material baler.

The recitation of a data structure embodied in a machine readable storage medium controlling a bulk material baler has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it

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merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Referring to claims 40-45, 47-50, 54, 56, 57, 60, and 61, Saylor discloses a moveable guide track section strut assembly ready for the next bale to be compacted after ejection apparatus ejects said bound bale from said baling station (Col. 8, lines 49-50); Saylor discloses a tensioning gripper to grab a distal end of said bale strapping length when said bale strapping length distal end completes transit of said guide track loop. Reversing the drive direction of said bale strapping feed drive for tensioning said bale strapping length after said tensioning gripper secures said bale strapping length distal end. Releasing of said bale strapping feeder drive and said tensioning gripper after said bale strapping end portions are fastened (Col. 5, lines 26-33 and lines 59-68; Col. 6, lines 1-43; Col. 7, lines 24-39; Col. 12, lines 58-61); Saylor discloses a tensioning pin to extend when said bale strapping length distal end completes transit of said guide track loop; and at least one tensioning pin to retract after said bale strapping length end portions are fastened (Col. 7, lines 40-65; Col. 8, lines 1-50); Saylor discloses at least one fastener tie cylinder to reverse for return to a ready position after said bale strapping length end portions are fastened together (Col. 11, lines 29-62; Col. 12, lines 1-6); Saylor discloses an ejector apparatus to eject the bale from said baling station after said moveable guide track section support strut assembly reaches an eject position and after said compression apparatus decompresses (Col. 4, lines 35-40; Col. 8, lines 38-50); Saylor discloses that said compression

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apparatus begins a next cycle after said bound bale has moved away from said compression apparatus and said moveable guide track (Col. 8, lines 49-50).

36. Claims 39-61 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,718,336 to Munro (supplied by applicant).

Referring to claims 39, 60, and 61, Munro teaches a programmable data structure embodied in a machine readable storage medium controlling a bulk material baler (Col. 6, lines 13-25; Fig. 17) comprising:

an instruction to a moveable guide track section support strut to move from a removed position to a closed position when a compression apparatus advances a volume of bulk material to be baled into a compressed position in a baling station (Col. 6, lines 37-48; Col. 3, lines 10-18);

an instruction to a bale wire feed drive to feed a predetermined length of bale wire into a guide track loop when said moveable guide track section support strut reaches said closed position (Col. 3, lines 1-28);

an instruction to a wire cutter to cut a proximal end of said bale wire length (Col. 6, lines 48-50);

an instruction to a wire knoter to knot a proximal end portion of said length of bale wire together with a distal end portion of said predetermined length of bale wire (Col. 6, lines 48-50);

an instruction to said moveable guide track section support strut assembly to move to said removed position after said wire length end portions are knotted together (Col. 7, lines 61-68);
and

an instruction to said compression apparatus to release from said compressed position after said moveable guide track sections are moved away from said compression apparatus (Fig. 14).

Referring to claims 40-61, Munro teaches a moveable guide track section strut assembly ready for the next bale to be compacted after ejection apparatus ejects said bound bale from said baling station; a tensioning gripper to grab a distal end of said bale strapping length when said bale strapping length distal end completes transit of said guide track loop. Reversing the drive direction of said bale strapping feed drive for tensioning said bale strapping length after said tensioning gripper secures said bale strapping length distal end. Releasing of said bale strapping feeder drive and said tensioning gripper after said bale strapping end portions are fastened; a tensioning pin to extend when said bale strapping length distal end completes transit of said guide track loop; and at least one tensioning pin to retract after said bale strapping length end portions are fastened; fastener tie cylinder to reverse for return to a ready position after said bale strapping length end portions are fastened together; an ejector apparatus to eject the bale from said baling station after said moveable guide track section support strut assembly reaches an eject position and after said compression apparatus decompresses; compression apparatus begins a next cycle after said bound bale has moved away from said compression apparatus and said moveable guide track (Col. 3, lines 29 – Col. 4, lines 46).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

37. Claims 55, 58, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,498,379 to Saylor, as applied to claims 39-45, 47-50, 54, 56, 57, 60, 61 above, and further in view of U.S. Patent No. 6,035,773 to Rempe (Supplied by applicant).

Referring to claims 55, 58, and 59, Saylor fails to teach a data structure stops said progressing bale strapping at a pre-configured length, and is responsive to a set of user programmable settings for user control of said bale strapping length with process variable configurations downloadable for operative application by a PLC.

However, referring to claims 55, 58, and 59, Rempe discloses a control unit for a baler comprising of a central processing unit (CPU) that may include any type of controller including a software controller and a memory for storing a plurality of process variable configurations input by an operator (Col. 4, lines 9-47; Col. 7, lines 23-32). Rempe discloses that said data structure, stops said progressing bale strapping at a pre-configured length, and is responsive to a set of user programmable settings for user control of said bale strapping length with process variable configurations downloadable for operative application by a PLC (Col. 4, lines 30-46; Col. 5, lines 40-60; Col. 3, lines 60-67; Col. 5, lines 21-28; Col. 6, lines 13-32).

Therefore it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to substitute the software equivalent controller of Rempe in place of the control circuit of Saylor to apply the control circuit of Saylor in a software controller with programmable memory for controlling a baler, as it is within the scope of the Saylor's invention to form the novel wire connections by other suitable machines (See Col. 5, lines 14-17 of '379).

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Hardware and software are logically equivalent. See Cf. *Magnavox v. Mattell*, 216 USPQ 28, 48-50 (N.D. Ill. 1982).

One of ordinary skill in the art would have been motivated to combine the control circuit of Saylor for controlling a bulk material baler in accordance with the teachings of Saylor, with the control unit of Rempe including a processing unit and memory for controlling a baler, because Rempe teaches that the control unit is adaptable to for performing and storing a plurality of process variable configurations for a baler (Col. 2, lines 49-67, Col. 4, lines 9-47, and Col. 7, lines 23-32 of Rempe).

38. Claims 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,498,379 to Saylor, as applied to claims 39-45, 47-50, 54, 56, 57, 60, 61 above, and further in view of U. S. Patent No. 5,239,919 to Maki et al (Supplied by applicant).

Referring to claims 51-53, Saylor fails to teach a programmable controller for a bulk material baler, including a memory, wherein, said controller signals and automatic alarm and a shutdown at a current monitor amperage level.

However, referring to claims 51-53, Maki et al. discloses a programmable controller for a bulk material baler, including a memory, wherein, said controller signals and automatic alarm and a shutdown at a current monitor amperage level (Col. 7, lines 16-40; Col. 8, lines 7-19).

Therefore it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include the automatic alarm of Maki et al., with Saylor.

One of ordinary skill in the art would have been motivated to combine these references because the sensor alarms for control of the baler provide an audible alarm, visual alarm, and

flashing messages on the video display to direct the operator to correct the trouble (Col. 7, lines 32-36 of '919).

Conclusion

39. The prior art or art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to a baler with sheaves for guiding wire that are rotatably mounted in a stationary position.

U.S. Pat/Pub. No. 5,009,154 to Boes.

The following patents or publications are cited to further show the state of the art with respect to a programmable baler with a tie function.

U.S. Pat/Pub. No. 5,631,826 to Chow.

The following patents or publications are cited to further show the state of the art with respect to a baler with a tying device lacking a wire cutter.

U.S. Pat/Pub. No. 5,673,614 to Jaenson (supplied by applicant).

40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

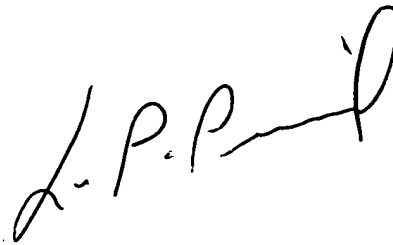
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SPS

Sean P. Shechtman

July 22, 2005

A handwritten signature in black ink, appearing to read "L. P. Picard", written in a cursive style.

**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**